

"We have a plan to beef up the Coast Guard, to modernize her ships, to make sure the Coast Guard is available around all the coasts of the country to protect the homeland."

President George W. Bush
February 27, 2002



UNITED STATES COAST GUARD: AMERICA'S MARITIME GUARDIANS

INTEGRATED DEEPWATER SYSTEM PROGRAM

The Coast Guard implemented a performance-based acquisition strategy that focused on system-level capabilities rather than assets. Deepwater is not just "new ships and aircraft," but an integrated approach to upgrading existing assets while transitioning to newer, more capable platforms, with improved Command, Control, Communications and Computers, Intelligence, Surveillance, Reconnaissance (C4ISR) and innovative logistics support systems. The Coast Guard's overarching goal for industry is to develop an integrated system of assets that maximizes operational effectiveness and minimizes total ownership costs.

"The Budget for Fiscal Year 2004 will continue to support the recapitalization of the U.S. Coast Guard's aging fleet, as well as targeted improvements in the areas of maritime domain awareness, command and control systems, and shore-side facilities."

Excerpt from the President's *National Strategy for Homeland Security*.

During the first phase of the Program, three competing industry teams developed integrated system concepts that optimized project cost, schedule, and performance objectives while remaining within Acquisition, Construction and Improvement (AC&I) and Operating Expenses (OE) targets. The industry teams developed their concepts targeted against a notional operations scenario based on historic Deepwater missions, using a notional AC&I funding stream of \$300M in the first year and \$500M per year (in FY98 dollars) thereafter until the Integrated Deepwater System (IDS) is fully deployed.

On June 25, 2002, the Coast Guard awarded the Phase 2 contract to Integrated Coast Guard Systems (ICGS), a joint venture established by Lockheed Martin and Northrop Grumman. The contract with ICGS is for an initial 5-year award term with the potential of five additional 5-year award terms. At full implementation ICGS' totally interoperable system comprises three classes of new cutters and their associated small boats, a new fixed-wing manned aircraft fleet, a combination of new and upgraded helicopters, and both cutter-based and land-based unmanned air vehicles

(UAVs). All of these highly capable assets are linked with state-of-the-art Command, Control, Communications and Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) systems, and are supported by an integrated logistics regime. Recognizing the dynamic nature of Coast Guard operations and missions, the ICGS implementation plan provides a flexible range of fully interoperable assets that can be adjusted in number and mix to accommodate current, emerging and potential future mission requirements. The total cost to design, develop and construct the system as proposed is approximately \$11B, funded through AC&I appropriations. In addition, approximately \$6B in OE-funded contracts will be administered by ICGS over the life of the contract.

The first five years will see significant progress for the Deepwater Program as ICGS will conduct C4ISR and other upgrades to several existing asset classes and command facilities ashore. These upgrades will provide communication technologies essential to interoperability and lay the foundation for the future system. ICGS will also begin to deliver new surface and air platforms and systems.

The Coast Guard and the Deepwater Program are key contributors to each of the three objectives of the *National Strategy for Homeland Security*:

- Prevent terrorist attacks within the United States;
- Reduce America's vulnerability to terrorism; and
- Minimize the damage and recover from attacks that do occur.

Deepwater is the front line of the Coast Guard's layered defense that will improve border and transportation security, increase the security of international shipping containers, improve intergovernmental law enforcement coordination, and guard America's critical infrastructure; all elements of the *Strategy*. As a result, recapitalization of the U.S. Coast Guard is specifically cited as a major initiative of the *Strategy*.



National Strategy for Homeland Security

The fully implemented system includes three new cutter classes: the National Security Cutter (NSC), the Offshore Patrol Cutter (OPC), and the Fast Response Cutter (FRC). The new cutters will be more capable and include mission-configurable spaces that can be tailored for specific operations. Through design and technology advances, the new cutters will launch small boats, helicopters and UAVs and handle large numbers of embarked migrants more effectively and with fewer crew.

Deepwater will replace the Coast Guard's existing fleet of air assets with a mix of UAVs and more capable manned aircraft. Deepwater will significantly improve Coast Guard C4ISR capabilities through better commercial satellite communications

The Coast Guard is a military, maritime, multi-mission service, with a proud history as America's Maritime Guardians. The security of America's maritime domain – including 95,000 miles of coastline and nearly 3.4 million square miles of ocean – is a vital element of America's economic prosperity and homeland security. Even before the September 11th terrorist attacks, the Coast Guard faced an array of maritime security challenges – countering terrorist threats, rescuing mariners in distress, interdicting drug smugglers and illegal migrants, fisheries enforcement and protecting the marine environment – that posed direct threats to American safety and security.

These critical missions demand forces with the capability to detect and intercept potential threats on America's maritime front lines before they reach our shores. The Coast Guard's deepwater ships and aircraft – operating both on the high seas as well as along our coasts – comprise the first line of the Service's layered defense against threats to America's maritime homeland security. However, the Coast Guard's current fleet of deepwater assets is aging and technologically obsolete. To address the resulting capability and availability challenges, the Coast Guard established the Integrated Deepwater System Program – often referred to as Deepwater – to modernize and replace its aging fleet of cutters and aircraft, and their supporting command-and-control and logistics systems.

“With this award we are delivering 21st Century capability to face America's 21st Century challenges; providing our personnel, who defend America on the seas with assets and technology to perform our essential missions; delivering on our commitment to our heritage; delivering on our duty to America; and providing a successful future for our Service and the Nation.”

Admiral Thomas H. Collins
Commandant, U.S. Coast Guard
June 25, 2002

systems, broadened situational awareness provided by greatly improved sensor systems to detect, classify, and identify targets, instantaneous, real-time voice, data, and video information exchange. These improvements will significantly enhance Coast Guard interoperability with the Navy, as well as other military, federal, state and local agencies.

These new assets, which possess common systems and technologies, common operational concepts, and a common logistics base, will give the Coast Guard a significantly improved ability to detect and identify all activities in the maritime arena, a capability known as “maritime domain awareness.” These same assets will also provide an improved ability to intercept and engage those activities that pose a direct threat to U.S. sovereignty and security. Because these assets have been designed around the task sequence – Surveil, Detect, Classify, Identify and Prosecute – used to perform all of the Coast Guard's missions, the system components will have the flexibility to respond to not only the full range of current Coast Guard responsibilities, but emerging threats and missions as well.

The Deepwater Program has undergone rigorous oversight. The program's approach has been reviewed by several teams of independent experts and government agencies, including the 1999 Interagency Task Force on Coast Guard Roles and Missions, the Office of Management and Budget and the General Accounting Office. Over the years, Deepwater has remained a learning organization, continuing to improve with each successive review while obtaining extensive validation.

This program will ensure that the Coast Guard – and America – has the right system of cutters, aircraft, command-and-control, and logistics systems to capably defend against maritime threats far out to sea, before they reach U.S. citizens, territory, or vital interests. This flexible and agile system of assets will not only meet our current mission demands, but future threats and challenges as well. The Integrated Deepwater System is critical to the Coast Guard's future and to America's ability to safeguard homeland and maritime security for generations to come.



National Security Cutter (NSC)



Offshore Patrol Cutter (OPC)



Fast Response Cutter (FRC)



Maritime Patrol Aircraft (MPA)



Recovery and Surveillance Aircraft (VRS)



Multi-Mission Cutter Helicopter (MCH)



High Altitude Unmanned Air Vehicle (HAUAV)



Vertical Take Off and Landing (VTOL) Unmanned Air Vehicles (VUAVs)